Montana.— Flathead Lake*; Mystic Lake*; Dry Creek*; Thompson Falls*; Fort Custer.

Colorado. - Clear Creek *; Twin Lakes *; Denver; Colorado Springs.

South Dakota. - Hill City.

Wyoming .- Fort Laramie; Fort Bridger.*

Utah.- Parley's Park.*

Nevada. - Mountain City *; East Humboldt Mts.*

Texas .- San Antonio.

Indiana-- Vincennes; Wheatland.

Mexico. — Maria Madre, Tres Marias Islands; Japana, Oaxaca.

The writer is indebted to Dr. C. Hart Merriam for use of the collection of the Biological Survey, and to Mr. Robert Ridgway for access to National Museum material.

THE SUMMER BIRDS OF SAN MIGUEL COUNTY, NEW MEXICO.

BY WALTON I. MITCHELL.

The territory covered by this article includes the cities of Las Vegas and East Las Vegas and numerous trips all over the county, in the mountains, far from civilization. The altitude of the country varies from 6,000 to 12,000 feet, and the climatology in the summer months is very similar to that of the Pacific Coast region, the days being warm but not close, the nights cool. The rainy season begins the first of June, lasting through July into August, the rain coming about eleven A. M. and clearing up about one P. M., the remainder of the day being clear and bright, as a rule. The county is watered by the Gallinos and Pecos Rivers and numerous other small streams, none large enough to be called 'creeks' in the East.

The vegetation consists mostly of pine and spruce and scrub oak, also greasewood, cactus, and quaking aspens and cottonwoods in a few localities. Migration is completed by the 15th of May, most summer residents arriving between April 10 and May 1.

I append short notes on species observed from January to the last week in June, 1898.

- 1. Colymbus nigricollis californicus. American Eared Grebe.—Rare. One pair breeding on a small alkali lake at an altitude of 7,000 feet. The only pair observed, but I am informed they are occasionally met with throughout the county.
- 2. Anas carolinensis. Green-winged Teal.—Tolerably common. Breeds through the eastern part of the county. Common during migration, as is also the Blue-wing, which does not remain to breed.
- 3. Plegadis guarauna. White-faced Glossy Ibis.—Not uncommon on the small lakes in the southern part of the county. More common in the southern part of the territory, but only met with in certain localities in this county.
- 4. Botaurus lentiginosus. American Bittern.—Rare. One specimen, killed on June 7 near Las Vegas, is the only one noted.
- 5. Recurvirostra americana. AMERICAN AVOCET.— Summer resident; common. Breeds commonly up to 8,500 feet. Arrives by the first of April.
- 6. Himantopus mexicanus. BLACK-NECKED STILT.—Tolerably common. Often met with breeding in company with the Avocets. Arrived about the middle of April.
- 7. Totanus solitarius. Solitary Sandpiper.— Fairly common. Breeds up to 8,000 feet.
- 8. Actitis macularia. Spotted Sandpiper.—Common. Breeds throughout the country around small ponds. Arrives by May 1.
- 9. Ægialitis vocifera. Killdeer.—Common. Breeds in May up to 11,000 feet. Arrives in March.
- 10. Ægialitis montana. Mountain Plover.—Not common. Breeds in the eastern part of the county up to 8,000 feet.
- 11. Callipepla gambeli. Gambel's Partridge.—Abundant throughout the county. Resident.
- 12. Dendragopus obscurus. Dusky Grouse.— Common. A nest was taken with nine fresh eggs on May 16 on the top of Hermit Peak, 10,000 feet altitude.
- 13. Meleagris gallopavo mexicana. MEXICAN TURKEY.—Common in the mountains from 8,000 feet to timber line. Breeds early in April.
- 14. Zenaidura macroura. Mourning Dove.— Abundant up to 11,000 feet. Arrives in March; breeds from April until July.
- 15. Cathartes aura. Turkey Vulture.—Not common. Occurs up to 12,000 feet. Nests in April.
- 16. Circus hudsonius. Marsh Hawk.—Not uncommon in the lower portion of the eastern part of the county. Breeds up to 8,000 feet.
- 17. Accipiter cooperi. Cooper's Hawk.—Common. Breeds up to 10,000 feet.

- 18. Accipiter atricapillus striatulus. Western Goshawk.— One male shot January 9, and a female, doubtless the mate, in the same spot on March 7.
- 19. Buteo borealis calurus. Western Red-Tail.—Fairly common. Breeds up to timber line, early in April.
- 20. Buteo swainsonii. Swainson's Hawk.—Common. Breeds up to 10,000 feet.
- 21. Aquila chrysaëtos. Golden Eagle.— Common; breeds up to timber line. Nesting begins early in March, usually in caves very difficult of access.
- 22. Falco mexicanus. Prairie Falcon.—Fairly common in the eastern part of the county. Breeds up to 9,000 feet. Nests in May.
- 23. Falco sparverius. American Sparrow Hawk.—Abundant. Breeds to 10,000 feet. Nests early in April.
- 24. Asio wilsonianus. American Long-eared Owl.—Rare. Have met with but three or four pairs. Breeds up to 10,000 feet, during April.
- 25. Syrnium occidentale. Spotted Owl.—Rare. Have seen but two individuals—last December, about twenty miles from Las Vegas, in the pine district at an altitude of 9,500 feet.
- 26. Megascops asio trichopsis. Mexican Screech Owl.—Common. Breeds up to timber line, early in April.
- 27. Speotyto cunicularia hypogæa. Burrowing Owl. Abundant locally. Breeds up to 8,000 feet during May and June.
- 28. Ceryle alcyon. Belted Kingfisher. Fairly common. Breeds up to 9,000 feet. Feeds on young mountain trout.
- 29. Dryobates villosus harrisii. HARRIS'S WOODPECKER.— Abundant in the pines up to timber line. Breeds early in May.
- 30. Sphyrapicus varius nuchalis. Red-Naped Sapsucker.— Common but not nearly as numerous as the next. Breeds from 9,000 to 12,000 feet.
- 31. Sphyrapicus thyroideus. WILLIAMSON'S SAPSUCKER.—Abundant. Breeds from 7,000 to 11,000. A nest taken May 30, was built in a live quaking aspen, on a mountain trail, 9,800 feet altitude.
- 32. Melanerpes formicivorus bairdi. California Woodpecker.—Common. Breeds from 8,000 to 10,000 feet.
- 33. Colaptes cafer. Red-shafted Flicker.—Abundant in the pines. Breeds up to timber line during May and June.
- 34. Phalænoptilus nuttalli. Poor-will.—Tolerably common. Breeds up to 9,000 feet. Arrives in May, breeding early in June.
- 35. Chordeiles virginianus henryi. Western Nighthawk.— Abundant. Breeds to 10,000 feet. Nests in June.
- 36. Aëronautes melanoleucus. White-throated Swift.—Not common. Breeds in cliffs during May, from 8,000 feet to timber line.
- 37. Trochilus alexandri. Black-chinned Hummingbird.— Common up to 8,000 feet. Breeds late in June.
- 38. Selasphorus platycercus. Broad-Tailed Hummingbird.—Common. Arrives in May, breeding most commonly at 9,000 feet.

- 39. Tyrannus verticalis. Arkansas Kingbird.—Common. Nests in June, up to 9,000 feet.
- 40. Sayornis saya. SAY'S PHŒBE.—Common. Arrives the last of March. Breeds early in May. One nest, found May 8, was built in a knot-hole of a hollow oak tree, 30 feet up.
- 41. Empidonax difficilis. Western Flycatcher. Rare. Breeds sparingly up to 10,000 feet.
- 42. Empidonax wrightii. WRIGHT'S FLYCATCHER. Common. Breeds most commonly at 9,000 feet.
- 43. Otocoris alpestris arenicola. Desert Horned Lark.—Abundant. Breeds commonly at from 8,000 feet down.
- 44. Pica pica hudsonica. American Magpie.—Common from 7,000 feet up. Breeds up to 12,000 feet.
- 45. Cyanocitta stelleri macrolopha. Long-crested Jay.—The most abundant bird in the county. Breeds up to 10,000 feet.
- 46. Aphelocoma woodhousei. Woodhouse's Jay.—Not nearly as common as the last. Found only up to 8,000 feet, frequenting scrub-oak on hillsides. Breeds in May.
- 47. Perisoreus canadensis capitalis. ROCKY MOUNTAIN JAY.—Common. Found only from 9,000 feet up to timber line, where it breeds in May.
- 48. Corvus corax sinuatus. American Raven.—Abundant from 8,000 feet up. Breeds in May, most commonly at 8,000 feet.
- 49. Nucifraga columbiana. CLARK'S NUTCRACKER.—Common from 9,000 feet up to timber line.
- 50. Cyanocephalus cyanocephalus. Piñon Jay.—Common among piñon pines from 8,000 feet up. Nests in April.
- 51. Molothrus ater. Cowberd.—Abundant. The birds most often imposed on are the Green-tailed Towhee and Stephens's Vireo.
- 52. Agelaius phœniceus. RED-WINGED BLACKBIRD.— Common. Breeds up to 9,000 feet.
- 53. Sturnella magna neglecta. Western Meadowlark.— Abundant. Breeds up to 8,000 feet.
- 54. Icterus bullocki. Bullock's Oriole.—Tolerably common. Breeds up to 10,000 feet.
- 55. Scolecophagus cyanocephalus. Brewer's Blackbird.— Fairly common, breeding from the plains to 8,000 feet.
- 56. Carpodacus mexicanus frontalis. House Finch.—Abundant around Las Vegas and vicinity. Have not found it in the mountains to any great extent. In the city the House Finch takes the place of the the English Sparrow, which is conspicuously absent.
- 57. Spinus psaltria. ARKANSAS GOLDFINCH.—Not common. Found breeding up to about 10,000 feet.
- 58. Poocætes gramineus confinis. Western Vesper Sparrow.—Common up to 8,000 feet.
- 59. Chondestes grammacus strigatus. Western Lark Sparrow.—Abundant from the Plains to 8,000 feet.

- 60. Spizella socialis arizonæ. Western Chipping Sparrow.— Abundant up to 9,000 feet, breeding most commonly at 7,000.
- 61. Junco phæonotus dorsalis. Red-backed Junco.—Abundant. Most common at 8,000 feet, breeding in clumps of scrub-oak on hillsides.
- 62. Melospiza fasciata montana. Mountain Song Sparrow.— Common, breeding from 7,000 to 9,000 feet. Song differs considerably from that of the eastern species.
- 63. Oreospiza chlorura. Green-tailed Towhee.— Common breeder from 7,000 to 9,000 feet. Nests in pastures and cleared land.
- 64. Pipilo fuscus mesoleucus. Cañon Towhee.— Common. Breeds abundantly in scrub growths along the Gallinas Cañon, the last of April.
- 65. Pipilo aberti. ABERT'S TOWHEE.— Fairly common but not nearly as much so as the two preceding species. Common up to 9,000 feet.
- 66. Zamelodia melanocephala. BLACK-HEADED GROSBEAK.—Only fairly common. Breeds from 8,000 feet down.
- 67. Petrochelidon lunifrons. CLIFF SWALLOW.—Abundant. Nests in cliffs and under eaves of residences in the county. Occurs up to 8,000 feet.
- 68. Tachycineta thalassina. VIOLET-GREEN SWALLOW.—Abundant up to 8,000 feet and occasionally higher, but the bulk breeds at the above altitude. Hollow trees are sometimes resorted to for nesting.
- 69. Vireo solitarius plumbeus. Plumbeous Vireo.— Common in the mountains up to 9,000 feet.
- 70. Vireo huttoni stephensi. Stephensi's Vireo.—Fairly common, breeding at 8,000 feet.
- 71. Dendroica æstiva. Yellow Warbler.— Fairly common in settled localities but not found in the mountains.
- 72. Dendroica graciæ. GRACE'S WARBLER.—Rare. Found a pair, evidently nesting, on June 12 at an altitude of 8,500 feet. Have seen very few and did not succeed in taking the nest.
- 73. Cinclus mexicanus. American Dipper.—Abundant. Most common from 8,000 feet up. Took several sets, from May 3 to May 16, each containing five fresh eggs. Two broods are raised, the second set of eggs being laid about July 1.

The Dipper is persecuted by the Mexicans who say it destroys young trout.

- 74. Salpinctes obsoletus. Rock Wren.— Common. Breeds in crevices of boulders and stone walls, most commonly at from about 8,000 feet down.
- 75. Catherpes mexicanus conspersus. Cañon Wren.—Fairly common, breeding commonly at 8,000 feet.
- 76. Thryothorus bewickii leucogaster. BAIRD's WREN.—Common. Breeds in dead pine stubs and deserted Woodpecker and Nuthatch holes. The great bulk breed below 8,000 feet.
- 77. Troglodytes aëdon aztecus. Western House Wren.— Abundant up to 10,000 feet. Raises two broods.

- 78. Certhia familiaris montana. ROCKY MOUNTAIN CREEPER.— Fairly common up to 10,000 feet, breeding between 7,000 and 9,000, occasionally up to timber line.
- 79. Sitta carolinensis aculeata. SLENDER-BILLED NUTHATCH.— Abundant. Breeds commonly in pines from 9,000 feet down to 7,000.
- 80. Sitta pygmæa. PIGMY NUTHATCH.—Abundant. The only really common bird during the winter months. They go up to 9,000 feet to breed and come much lower during the winter.
- 81. Parus gambeli. Mountain Chickadee.— Common. Breeds in May and June, from 9,000 feet up to timber line.
- 82. Myadestes townsendii. Townsend's Solitaire. Rare. Took a nest with four fresh eggs on June 7, at an altitude of nearly 10,000 feet.
- 83. Merula migratoria propinqua. Western Robin.—Abundant. Arrives the latter part of February, breeding in April, May and June, ac ording to altitude. Common up to 10,000 feet.
- E₁. Sialia mexicana bairdi. Chestnut-backed Bluebird.— Fairly common up to 12,000 feet. Breeds up to nearly 10,000 feet during May and June. Nests usually in deserted Woodpecker's holes or in hollow stumps.
- 85. Sialia arctica. Mountain Bluebird.— Common. Arrives early in February, breeding in May up to 9,000 feet.

AVIFAUNA OF THE REVILLAGIGEDO ISLANDS.

BY A. W. ANTHONY.

DURING the past summer (1897) a little over a month was spent in exploring the Revillagigedo Islands, lying to the southwest of Cape St. Lucas, Lower California, and as very little is known of the birds of this region I have thought it worth while to-put on record my notes taken while there.

Socorro Island, the largest of the group, lies about 240 miles southwest of Cape St. Lucas and about 285 miles to the westward of Maria Madre, the largest of the Tres Marias group, off San Blas.

Clarion Island lies approximately 200 miles to the westward of Socorro and somewhat further south, while San Benedicte is but 35 miles north of Socorro. Rocca Partida (Divided Rock) is